

Cancer Profiles

North Carolina
August 2007

A fact sheet produced by the North Carolina Central Cancer Registry (CCR)

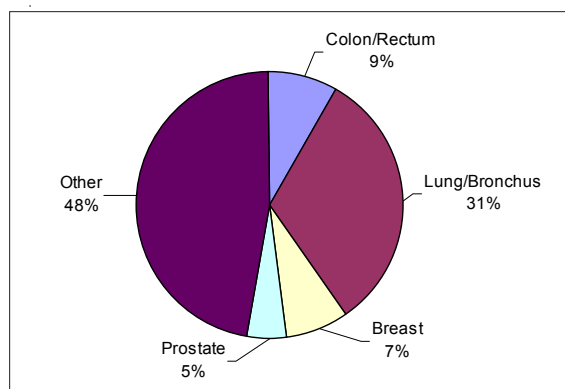
CANCER TAKES TOO MANY LIVES IN NORTH CAROLINA

Cancer is the second leading cause of death in North Carolina and in the United States. In 2005, 16,673 persons in North Carolina died from cancer. It is estimated that nearly four in ten North Carolinians will develop cancer during their lives.

Deaths	2005 North Carolina	2004 United States
% of Deaths Due to Cancer	22.4%	22.6%

Cancer is a group of more than 100 different diseases, but all are characterized by uncontrolled growth and spread of abnormal cells. Cancer risk increases with age, and varies by gender and race. As the average age of the population increases, the incidence of cancer will increase as well. Currently in North Carolina, cancer is the leading cause of death for people under the age of 85. Cancer is expected to surpass heart disease and become the leading cause of death in North Carolina and the nation by the year 2015. The majority of cancer deaths occur at four sites: lung, colon, female breast, and prostate (Figure 1).

Figure 1. North Carolina 2005 Cancer Deaths by Site



It is generally accepted that over 60 percent of all cancers are related to personal lifestyle or environmental factors, such as smoking and diet, and are therefore preventable. Other factors such as age, gender, and family history of a specific cancer are also associated with the development of cancer and aid in the identification of people at high risk.

For several cancers, effective treatment is available. For these cancers, early detection saves lives. For example,

almost 98 percent of women who are diagnosed with breast cancer in the earliest stage survive the disease, whereas only 26 percent survive if the disease is diagnosed in the most advanced stage. The opportunity for disease control and for reducing the number of cancer deaths rests with prevention and early detection so that treatment of the disease can be effective.

In 2004, 41,211 cancer cases were reported for North Carolina residents. These numbers are expected to increase as the population ages.

2007 Projected Cancer Cases	North Carolina	United States
Lung/Bronchus	5,550	213,380
Colon/Rectum	4,425	112,340
Female Breast	6,155	178,480
Prostate	6,420	218,890
All Cancers	40,860	1,444,920

Early detection is often stressed; however for some cancers, prevention is more beneficial than early detection. For example, lung cancer is a disease that takes many years to develop and often metastasizes, or spreads, to other parts of the body before it is detected. Early detection and treatment options are extremely limited, and most patients with lung cancer die within a few months of diagnosis. In fact, lung cancer is currently the leading cause of cancer death among both men and women. This need not be the case, as lung cancer is also one of the most preventable cancers. Although many believe air pollution is the major cause of lung cancer, smoking is by far the leading risk factor for developing lung cancer. It is estimated that 80 percent of lung cancers result from smoking. Cigar and pipe smoking are almost as likely to cause lung cancer as cigarette smoking. Non-smokers who breathe in second-hand smoke are also at increased risk. The risk of lung cancer does seem to increase with age, and women who smoke seem at greater risk for developing cancer than men who smoke.

Stopping smoking at any age lowers the subsequent risk of developing lung cancer. The Behavioral Risk Factor Surveillance System, an annual survey of adult North Carolinians, examines risk factors such as these. For the 15,569 persons who indicated their age and smoking behaviors in the 2006 survey, the highest percentages of smokers were between 18 and 54 years of age (see table back). According to this survey, adults 55 and older have the highest cessation rate, indicating that as North Carolinians age, the number of smokers does appear to decrease. A reduction in smoking will decrease the number of lung cancers that are diagnosed over time.

RISK FACTORS AND INTERVENTIONS

Smoking: Smoking and the use of smokeless tobacco are responsible for the majority of all cancers of the lung, trachea, bronchus, larynx, pharynx, oral cavity, and esophagus. Smoking is the leading cause of preventable death in the United States.

Nutrition and Physical Activity: Sustaining a healthy diet and being active can influence the risk of developing cancer. Eating a variety of healthful foods, with an emphasis on plant sources, adopting a physically active lifestyle, maintaining a healthy weight, and limiting alcohol consumption are recommended by the American Cancer Society for cancer prevention.

Sunlight and Ultraviolet Rays: Exposure to intense sunlight and UV rays are risk factors in developing nonmelanoma skin cancer. Sun safety tips for lowering this risk include limiting direct sun exposure during midday, covering up when outdoors, using sunscreen with a Sun Protection Factor of at least 15, and avoiding tanning beds and sunlamps.

Screening: Early detection is extremely important for those cancers that can be cured and can be discovered early. Breast cancer is a good example of this. Stage at diagnosis is the most important factor in determining chance of survival from breast cancer. In 2007, a projected 6,155 women in North Carolina will be diagnosed with breast cancer. Many of these women will survive because they were diagnosed early, but some will face premature death because they were diagnosed too late for effective treatment.

Women 40 years and older should have a mammogram every year. A clinical breast exam (CBE) by a health care professional is also recommended annually after the age of 40. Women 20-39 years of age should have a CBE by a health care professional every three years. Monthly self-examinations are an option for women beginning in their twenties.

Colorectal cancer is the third most common type of cancer among Americans, not including skin cancer. It is the second leading cause of cancer-related deaths in North Carolina and in the United States. Colorectal cancer occurs most frequently in both women and men over the age of 50 and is generally slow to develop. For this reason, yearly screening tests such as the FOBT

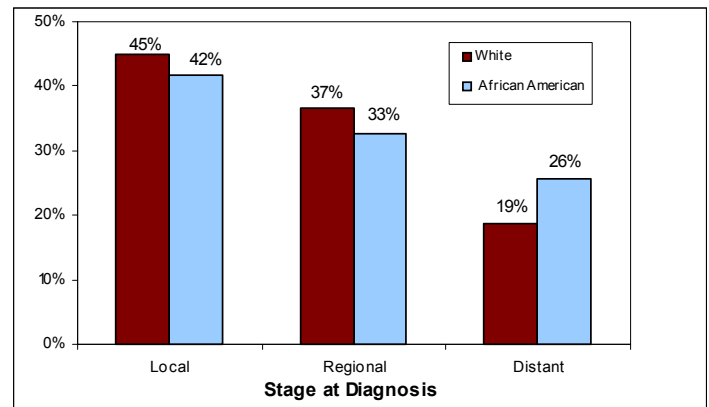
Percentage of Respondents in NC in Each Age Group who currently smoke or have smoked in the past

Age Group	Total Respondents	Current Smoker	Former Smoker
18-24	625	27.8%	9.8%
25-34	1,862	26.4%	15.9%
35-44	2,662	22.7%	17.6%
45-54	3,083	25.7%	25.9%
55-64	3,084	19.6%	35.7%
65+	4,141	9.9%	41.1%
All Ages	15,569	22.1%	24.1%

Data Source: Behavioral Risk Factor Surveillance System, NC 2006

Figure 2: Stage of Disease at Diagnosis for Colorectal Cancer in North Carolina Diagnosed in 2004

(Total Colorectal Incidence: White=2,920 cases, African American=776 cases; cases with unknown stage not included)



(fecal occult blood test) are suggested. In addition to the yearly screening, it is recommended to receive a flexible sigmoidoscopy every 5 years or a colonoscopy every 10 years. African American men have the highest colorectal cancer incidence and mortality rates and have a greater percentage of cases diagnosed in the latter stages (Figure 2). Thus, it is suggested that they, along with those with a family history of colorectal cancer, talk with their doctors about starting screenings at a younger age and in more frequent intervals.

FOR MORE INFORMATION

American Cancer Society • 1-800-ACS-2345
Web site: <http://www.cancer.org/>

Cancer Information Service • 1-800-4CANCER
Sponsored by the National Cancer Institute

N.C. Division of Public Health, State Center for Health Statistics
N.C. Central Cancer Registry (CCR) • 919-715-4555
1908 Mail Service Center • Raleigh, NC 27699-1908
Web site: <http://www.schs.state.nc.us/SCHS/>

N.C. Advisory Committee for Cancer Coordination and Control
919-707-5304
1922 Mail Service Center • Raleigh, NC 27699-1922

Cancer Profiles are produced by the Central Cancer Registry



State of North Carolina • Michael F. Easley, Governor
Department of Health and Human Services
Division of Public Health
State Center for Health Statistics

The Department of Health and Human Services does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in or in the provision of services.

The CCR acknowledges the Centers for Disease Control and Prevention for its support of this publication, under cooperative agreement U58DP000832. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Centers for Disease Control and Prevention.